REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claims 14 and 25 have been amended.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

Claims 14-26 are now pending in this application.

I. REJECTIONS UNDER 35 U.S.C. § 102(b)

The examiner rejects claims 14, 24 and 25 under 35 U.S.C. §102(b) for allegedly being anticipated by Reed *et al.* Applicants respectfully traverse the rejection.

Reed examined the mechanism by which peptide YY (PYY) improves survival in experimental necrotizing pancreatitis. Reed et al., pg. 179, ¶3. Reed decided to evaluate the levels of IL-6 because it was a known marker of disease severity in pancreatitis. *Id.* Reed observed that PYY "lowers early levels of circulating IL-6 and TNFα in response to a lethal murine model of necrotizing pancreatitis." Reed et al., pg. 180, ¶2.

According to the examiner, Reed's observations imply that PYY reduces the physiological activity of IL-6. The examiner errs factually in this regard. Observing a lower level of circulating IL-6 and TNFα is a far cry from treating pancreatitis as presently claimed. The rejection does not offer any reason why one of ordinary skill would even attempt to utilize IL-6 antagonists based on this reference. It is not at all clear from the reference whether any benefit would be conferred by blocking IL-6 binding, as opposed to lowering levels of it in circulation. Indeed, Reed merely noted that PYY lowers early levels of circulating IL-6 in a murine model of necrotizing pancreatitis. There is no suggestion that PYY alters the physiological activity of IL-6. Furthermore, Reed does not suggest that PYY blocks signal transduction by IL-6, a requirement for IL-6 antagonists of the claimed invention. *See* application, pg. 5, ln. 30-31. Moreover, Reed fails to teach a method of treating pancreatitis that employs an IL-6 antagonist that inhibits the binding of IL-6, IL-6

receptor or gp130, as now recited in the claims. Thus, Reed cannot anticipate the claimed methods.

Applicants, therefore, request that the rejection be withdrawn.

II. REJECTIONS UNDER 35 U.S.C. § 103

A. Rejection of the Claims Over Reed et al. in View of Sato et al. and/or Kishimoto et al.

The examiner rejects claims 15-23 and 26 under 35 U.S.C. §103(a) as allegedly being unpatentable over Reed *et al.* in view of Sato *et al.* and/or Kishimoto *et al.* Applicants respectfully traverse the rejection.

A proper rejection for obviousness under §103 requires consideration of two factors: (1) whether the prior art would have suggested to those of ordinary skill in the art that they should make the claimed composition, or device, or carry out the claimed process, and (2) whether the prior art would also have revealed that in so making or carrying out, those of ordinary skill would have a reasonable expectation of success. Both the suggestion and the reasonable expectation of success must be founded in the prior art, not in the applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 493, 20 USPQ2d 1438 (Fed. Cir. 1991). In the pending case, the examiner has failed to establish a *prima facie* case of obviousness.

In particular, the examiner has failed to provide any objective evidence of record that an artisan at the time of the invention would have been motivated to combine the cited references to obtain the claimed invention. In asserting the combination, the examiner relied on the erroneous assertion that Reed taught the treatment of pancreatitis using an "IL-6 antagonist." As noted above, Reed made no such teaching. Accordingly, the rejection should be withdrawn.

B. Rejection of the Claims Over Sato et al. and/or Kishimoto et al. in View of Gross et al. and Farkas et al.

The examiner also rejects claims 15-26 under 35 U.S.C. §103(a) as allegedly being unpatentable over Sato *et al.* and/or Kishimoto *et al.* in view of Gross *et al.* and Farkas *et al.* Applicants respectfully traverse the rejection.

According to the examiner, Sato and Kishimoto provide antibodies against IL-6 receptors and teach the use such antibodies in the treatment of IL-6 related conditions. The examiner characterizes Gross as "teach[ing] that IL-6 concentrations are associated with acute pancreatitis" and Farkas as "teach[ing] that experimental acute pancreatitis results in increased blood-brain barrier permeability ... and that such is associated with increased IL-6 levels." Office Action, pg. 4, ¶1. The examiner again fails to cite any objective evidence of a motivation to combine these references with Sato or Kishimoto, however. Instead, the examiner declares out of hand that a "motivation to if [sic] found directly in the Gross and Farkas references." *Id.*

Like Reed, Gross and Farkas merely note that IL-6 is a reliable ***marker*** for evaluating acute pancreatitis. Neither reference states, or even suggests, that blocking signal transduction by IL-6 or inhibiting the biological activity of IL-6 could be an effective means of ***treating*** pancreatitis.

Similarly, the examiner has failed to prove an artisan would have combined the cited references to obtain the claimed invention with a reasonable expectation of success. In this regard, the examiner simply states that "[b]oth [Sato and Kishimoto] teach the use of anti-IL-6R antibodies for the treatment of IL-6 related conditions." Office Action, pg. 4, ¶2. Contrary to the examiner's assertion, however, the fact that Sato demonstrated that an anti-IL-6R antibody showed strong antitumor cell activity against multiple myeloma cells and Kishimoto showed that anti-IL-6R antibody increased survival time in a colon 26-induced cachexia model and suppressed a reduction in body weight in a squamous carcinoma cell line (occ-1)-induced cachexia model foretells nothing about the likelihood of success of using an IL-6 antagonist to treat pancreatitis.

Accordingly, applicants respectfully request that the rejections be withdrawn.

****

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

Date Oct. 21, 2004 By _____

FOLEY & LARDNER LLP
Washington Harbour
3000 K Street, N.W., Suite 500
Washington, D.C. 20007-5143
Telephone: (202) 672-5571
Facsimile: (202) 672-5399

Stephen B. Maebius
Attorney for Applicant
Registration No. 35,264